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United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Custom House, Room 217
200 Chestnut Street
Philadelphia, Pennsylvania 19106-2904

November 25, 1994

Thomas C. Voltaggio, Director
Hazardous Waste Management Division (3HW00)
U.S. Environmental Protection Agency
841 Chestnut Street
Philadelphia, PA 19107

Dear Mr. Voltaggio:

Thank you for providing, via RPM Russell Fish, the Department of the Interior (Department) the opportunity to review and comment on the draft Proposed Remedial Action Plan (PRAP) for the Saltville Superfund Site (Site), Smyth and Washington Counties, Virginia. The following comments are intended to re-emphasize Departmental concerns about Site remediation and to assist you in completing the final PRAP.

Background

The Department completed a Preliminary Natural Resources Survey for the Site on November 10, 1993, and our representatives met with you and other EPA personnel to further discuss the Site on February 2, 1994. In addition, the U.S. Fish and Wildlife Service (FWS) conducted studies of mercury in aquatic media of the North Fork Holston River and sent numerous letters to the EPA related to this work, including requests to initiate informal Section 7 consultation under the Endangered Species Act. These Departmental/FWS reports and letters clearly communicate our great concern about the Site's toxic effects to environmental resources, including Departmental trust resources, as well as our recommendations on remedial planning to address this concern.

Proposed Remedial Action Plan

The draft PRAP states that the primary objective of the Operable Unit (OU) 2 remedy is to "inhibit the assimilation of mercury by the public or the environment resulting from contact with or ingestion of mercury." Alternative remedies and a preferred remedy for Pond 5, Pond 6 and the Former Chlorine Plant Site (FCPS) are identified and compared in the draft PRAP. The preferred remedies are as follows:

> Pond 5: Alternative P5F-X, groundwater management and RCRA cap with Pond 5 effluent treatment.

Pond 6: Alternative P6D, permeable soil cover and localized containment of demolition debris with vertical barrier wall and multilayer cap.

FCPS: Alternative FCPSE-X, excavation with on-site treatment.

General Comments

Although remediation of Site contamination in the North Fork Holston River is to be addressed in OU 3, and this area of Site impact has constituted the Department's main focus of interest, we believe that the River environment can never be fully protected, regardless of clean-up, unless the OU 2 remedy effectively and permanently removes or isolates the source of the mercury contamination. To this end, the Department is doubtful that the alternative remedies will provide the effective, long term protection that is needed and which we believe should constitute our mutual objective in protecting environmental resources.

We are very concerned that none of the Pond 5 and Pond 6 remedial alternatives reduce toxicity or volume of hazardous substances. Containment remedies such as these are sometimes characterized as "ticking time bombs," because they require continuous monitoring and maintenance to insure that site contamination does not escape containment and re-enter the environment. Even where there is diligent monitoring and maintenance, contaminant releases can be triggered by natural disasters, such as severe flooding. The threat of severe flooding here is very real, since the Site lies within the 100-year floodplain and has been previously affected by major flooding.

The Department considers the remedial alternatives presented in the PRAP to be temporary remedial solutions that would not provide permanent protection to the environment, including our trust resources. Excavation and removal of Site contamination, although admittedly very expensive, would provide permanent, effective protection for the environment. Moreover, the added cost of excavation and removal should be considered in light of the cost of continuous monitoring and maintenance, including the likely cost of catastrophic repairs and associated removal actions.

Specific Comments

A human health risk assessment of exposure to mercury contamination under present and future conditions of resident or industrial use was considered in determining the preferred remedies. However, an ecological risk assessment to determine potential risks to aquatic and terrestrial ecosystems has not been conducted, and therefore could not be considered, in determining the preferred remedies. Given that environmental receptors are often toxicologically more

sensitive than human receptors, the final PRAP should indicate that the remedial alternatives do not reflect an assessment of the environmental risk and, therefore, may not be fully protective of the environment.

A long-term monitoring plan should be incorporated into the remedial alternatives. Ground water monitoring wells should be installed to detect the movement of contaminants in the water leaving the remediated ponds. This information is needed to ascertain how the North Fork Holston River will be monitored and what will be done to prevent or mitigate impacts to the river during remediation. As part of this monitoring, the Department recommends that both sediment and surface water in the North Fork Holston River be analyzed for mercury, and that toxicity tests be performed on the sampled sediment and water to insure that the remedial alternatives are protective of aquatic species.

The Summary Table for Clean-up Levels on page 23 indicates a clean-up level for mercury in commercial/industrial soils of 310 mg/kg. This level is high and will not protect terrestrial receptors. We recommend a more conservative clean-up level of 2 mg/kg (Persuad et. al. 1992). This level is also more protective of aquatic receptors that may be exposed as a result of surface runoff and ground water discharge into the North Fork Holston River.

Compliance with the Endangered Species Act

The FWS advises us that the EPA has not yet initiated informal consultation in accordance with Section 7 of the Endangered Species Act. The Department recommends that EPA request Section 7 consultation as soon as possible in order to resolve relevant issues and to avoid impacts on EPA's scheduled decisions for the Site to the extent possible.

Summary Comments

The Department is very doubtful that any of the remedial alternatives, as currently described, would provide permanent, effective protection for the environment, including our trust resources. The Department recommends that contamination at Pond 5 and Pond 6 be excavated and removed to provide permanent, effective protection for the environment. If excavation and removal are not feasible, we recommend that the selected remedy for the ponds include placement of an effective structural barrier between the Site and the river which would be designed to protect the contaminated area from major (100-year storm) flooding.

Please provide this office with two copies of the final PRAP as soon as it is released for public comment. The Department is available to discuss these issue with your staff to ensure effective coordination on these matters.

Sincerely,

Don Henne

Don Henne
Regional Environmental Officer

cc:
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Citation

Persuad, D. Jaagumagi, R., and Hayton, A. 1992. Guidelines for the Protection and management of Aquatic Sediment Quality in Ontario. Ontario Ministry of the Environment, Water resources Branch, Toronto, Canada.